The documentation and process conversion measures necessary to comply with this amendment shall be completed by

INCH-POUND

MIL-S-19500/385A
AMENDMENT 3
2 July 1992
SUPERSEDING
AMENDMENT 2
17 October 1990

MILITARY SPECIFICATION

SEMICONDUCTOR DEVICE, FIELD-EFFECT TRANSISTOR, N-CHANNEL, SILICON
TYPES 2N4856 THROUGH 2N4861
JAN, JANTX, JANTXV, AND JANS

This amendment forms a part of MIL-S-19500/385A, dated 24 April 1985, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 3

Dimension table, line h; delete and substitute as follows:

"

h	---	.020	---	0.508	

"

PAGE 7

Screen table, delete and substitute the following:

"

Screen (see table II of MIL-S-19500)	Measurement	
	JANS level	JANTX and JANTXV levels
9	$I_{D(off)1}$ and $r_{ds(on)}$, I_{GSS1}, I_{DSS}	Not applicable
10	Not applicable	Not applicable
11	ΔI_{GSS1} = ±0.1 nA or ±100% of initial value, whichever is greater; $I_{D(off)1}$, I_{DSS}; $\Delta r_{ds(on)}$ = ±20%; ΔI_{DSS} = ±15% $\Delta I_{D(off)1}$ = 0.1 nA or ±100% of initial value	$I_{D(off)1}$ and $r_{ds(on)}$ I_{GSS1}, I_{DSS}
12	T_A = +175°C V_{GS} = 80% of rated V_{GS}, V_{DS} = 0	T_A = +175°C V_{GS} = 80% of rated V_{GS} V_{DS} = 0
13	Subgroups 2 and 3 of table I herein; ΔI_{DSS} ±15%, $\Delta r_{ds(on)}$ = ±20%; $\Delta I_{D(off)1}$ = 0.1 nA dc or ±100% of initial value ΔI_{GSS1} = ±0.1 nA or ±100% of initial value, whichever is greater	Subgroup 2 of table I herein; $\Delta r_{ds(on)}$ = ±20%; ΔI_{GSS1} = 0.1 nA or ±100% of initial value, whichever is greater $\Delta I_{D(off)1}$ = 0.1 nA or ±100% of of initial value ΔI_{DSS} = ±15%

"

PAGE 8

* Concluding material; delete and substitute as printed in this amendment.

PAGE 9

* TABLE I, subgroup 2, small-signal drain-to-source "ON" resistance: Delete entire test and substitute:

"

Static drain-to-source "ON" state resistance	3421	V_{GS} = 0, I_D = 1.0 mA dc	$r_{ds(on)}$			
2N4856, 2N4859				25	ohms	
2N4857, 2N4860				40	ohms	
2N4858, 2N4861				60	ohms	

"

PAGE 12

TABLE IIa, subgroup 6, conditions column: Delete "$R_{\theta JC} \leq 97°C/W$" and substitute "$R_{\theta JA} \leq 486°C/W$".

PAGE 14

TABLE III, subgroup 7, conditions column: Delete "$R_{\theta JC} \leq 97°C/W$" and substitute "$R_{\theta JA} \leq 486°C/W$".

PAGE 15

* TABLE IV, steps 2, 8, and 9, inspection column: Delete:

" 2N4856, 2N4857
2N4858, 2N4859
2N4860, 2N4861"

and substitute

" 2N4856, 2N4859
2N4857, 2N4860
2N4858, 2N4861"

TABLE IV, step 2, maximum limits column: Delete "120" and substitute "175".

* TABLE IV, step 4, delete step in its entirety and substitute the following:

"

Static drain-to-source "ON" state resistance	3421	V_{GS} = 0, I_D = 1.0 mA dc	$r_{ds(on)}$			
2N4856, 2N4859				25	ohms	
2N4857, 2N4860				40	ohms	
2N4858, 2N4861				60	ohms	

"

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy EC
Air Force - 17
NASA - NA

Review activities:
Air Force - 85, 99
NASA - LRC, MSF
DLA - ES

Preparing activity:
NASA - NA

Agent:
DLA - ES

(Project 5961-1385)